147627

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

MAR 1 4 1980

OFFICE OF ENFORCEMENT

SUBJECT: Visual Inspection of Chemical Recovery Systems, Inc. Elyria, Ohio - February 5, 1980

FROM: F. J. Biros, Hazardous Waste Enforcement Task Force

TO: Files

A visual inspection was conducted of the Chemical Recovery Systems, Inc. Facility located at 124 Locust St., Elyria, Ohio in the company of the following personnel:

Gene Meyer - Region 5, AHMD
Leon Acierto - Region 5, ED
Melanie Topfer - Region 5, ED
Dan Watson - Region 5, Eastern-Ohio District Office

Sixteen polaroid photos were taken and are available in the TF Chemical Recovery Systems, Inc. working file. Dan Watson of the Ohio District Office took 5 samples while on site including: 1) contents of an open drum ("spent" solvent) adjacent to still in building housing the machine shop; 2) pooled liquid on ground adjacent to drum; 3) soil/ liquid sample between row of drums located across driveway from machine shop; 4) soil/liquid sample in doorway of still building adjacent to Black River; and, 5) soil/leachate sample on bank of Black River. The group arrived at the site approximately 11:15 a.m. And remained on site until approximately 1:30 p .m. The weather was overcast to partly cloudy with a temperature of approximately 11°F.

General Observations

We met with both Jim Freeman, owner/operator and Bob Spears, employee at various times during our stay. The site is approximately 4 acres in size, rectangular, with the long axis running north to south parallel to the Black River and Locust St. There are three building complexes on site; a) loading dock, b) garage still, machine shop, and c) still, storage building. There are approximately 5000-6000 drums on site according to my estimation, although Freeman estimated the number at 4000. According to Freeman, 3200 are "empty" and 800 contain "spent" solvents to be reclaimed under contract, by the still operations of CRS. Reclaimed solvent is sold back to the generator under the terms of the recovery agreements.

On further discussion, Freeman indicated the 3200 drums are not exactly empty, but contain 1-3 inches of sludge residue from the "spent" solvents. He indicated he had a difficult time getting rid of the sludge residue. Incinerator/Disposal Facilities such as Robert Ross were reluctant to handle the sludge materials. However, he stated that he expected to have all drums removed within 6 months. Freeman also stated that the solvents he reclaimed included methyl ethyl ketone, methyl-i-butyl ketone, toluene, xylenes, aromatic hydrocarbons, aliphatic hydrocarbons, paint-solvents, esters, chlorinated hydrocarbons including 1,1,1- trichloroethane, trichloromethylene and perchloroethylene among others.

There were at least 8 bulk, portable storage tanks of chemicals on site ranging up to approximately 15,000 gal capacity and 4 tank trucks. Most contain distilled solvents but some contain sludge residues from the "spent" solvent drums according to Mr. Spears. Many of the bulk tanks were not isolated from buildings on site, were not plumbed or grounded and all but one were not diked. (NFPA Flammable and Combustible Liquids Code, 1977 - Chapter 2 Tank Storage).

The storage areas where drums containing "spent" solvents were stacked appeared to be well laid out. However, DOT labels were not evident on all drums. Fewer than 200 drums were stacked in such areas not more than 3 drums high and accessible by a 12 feet road. However, "empty" drums were not stacked neatly. Some "empty" drums were perched precariously on the river bank and on pallets that were in a poor state of repair. Many "empty" drums were rusted and deteriorating; some were stacked 4-high and in danger of callapse, and others were leaking residues. Contrary to Mr. Freeman's statement, many of these drums appeared to be 1/3 to 1/2 full on sounding. The sludge materials leaking from the rusted drums were in all cases frozen solid because of the ambient temperature so no samples were taken by Dan Watson

Bob Spears indicated that the owner, Mr. Freeman, intended very shortly to dispose of most of the drums and operate the facility as a reclamation tank farm with only a small "turnover" inventory of "spent" solvent 55-gal. drums. The distilled solvents would be pumped directly from the still recovery vessel to the tank trucks and transported to buyers within a short period of time. Mr. Spears said that to his knowledge Mr. Freeman did not intend to sell the site to Harshaw Chemical Co. This contradicted a statement by Mr. Freeman who indicated he would very much like to sell the propety to Harshaw.

On questioning, Mr. Spears indicated that the slick observed in the river was the result of materials leaking from the sump in

the still house on the bank of the river. He stated that CRS had used the sump (24 inches square by 38 inches deep, constructed of cement blocks) up until the time they had discovered it was constructed of concrete blocks and material was noted to be leaching through the blocks and into the river. He acknowledged that the previous owner, Obitts Chemical Co., was probably partially responsible for the river slick.

Following a walk through the site, the group met with Mr. Spears in the CRS trailer in order to view CRS manifests, logs and other records. Mr. Spears, however, indicated that no records were now available on the site and he did not know if Mr. Freeman kept a record of materials coming through the site.

Conditions on Site

The following conditions and operations on the CRS site represent serious environmental problems in my opinion.

o Still operations - CRS operated two stills of approximately 200-300 gal/hours capacity each during the time I was on site. There were parts associated with a third still, as well. The conditions of the stills and the manner of operation including the transfer of spent solvents for distillation constitute an imminent fire hazard to the employees on site and the neighboring community. Private residences and a church were visible directly across the Black River, a distance of 500-600 feet from the site. The odor of solvents, aromatic and chlorinated hydrocarbons, was pervasive in and around the still buildings on site and in the steam emissions from the buildings. Diesel engines and electric pumps were operated in close proximity to the stills. There was a great deal of ground spillage occurring in the solvent transfer operations.

o Drums containing sludge residues - Mr. Freeman indicated that more than 3200 drums on site contained residues remaining from the "spent" solvents. These drums are stored in a hazardous fashion throughout the site. Some are perched precariously on the river bank, others are stacked 4 high. The drums contain, up to 1/3 and 1/2 of their capacity, sludge residues of unknown composition, presumably PCB, oil materials, paint pigments, plating residues etc. Although no analytical data is available on the sludges, to my knowledge, spillage and leaking from rusted, damaged drums presents a significant contamination threat to soil and groundwater if the residues are, in fact, what they may be expected to be.

o River Slick - The leaching of oils and chemical materials through the river bank into the river was evident during this site inspection. CRS has attempted to control the river contamination by use of a containment boom and fabric chemical "blotters". Both of these approaches are ineffective, especially during the winter months. The leaching continues and presents a serious environmental contamination problem, since the active slick results from chemicals leaching through the river bank from the still building immediately adjacent to the river.

o Security - The site is not totally secure. Public access from the river bank side and some areas of the Locust St. side is possible.

Suggested Actions

o Obtain available data fro OEPA on the composition of the river slick to connect it to the CRS operation.

o Additional sampling of the drum residues and river slick would be desirable.

o Conduct inspection to determine compliance with Ohio hydrocarbon air emissions regulation of the SIP.

o Contact NIOSH to have them conduct an occupational survey of the work practices required by Freeman and employed by his workers. NIOSH should also be requested to conduct explosimter measurements, solvent flash point measurements and ambient air measurements of the concentration of organic vapors.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region V

DATE: FEB 13 1980

SUBJECT: Prioritization of Analytical Work
Requested by Enforcement

HMS file

FROM: Jon Barney JLB
Special Permit Section

TO: Curtis Ross, Director
Central Regional Laboratory

Confirming my conversation today with Emilio Sturino of your staff, the following list indicates the order in which the analytical work should be done on these Enforcement-requested surveys:

1. Bofors Lakeway, Muskegon, Michigan

✓2. Chemical Recovery, Elyria, Ohio

3. Jack Webb/Kraus Sites, Rock Creek, Ohio

4. Federal Marine Terminals, Wyandotte, Michigan

From my discussion with you on February 8, 1980, I understand that items 1, 3, and 4 will require approximately three weeks each and item 2 somewhat less, and that work on these samples could begin around the first week in March. Please let me know the estimated completion dates for these projects as soon as they are scheduled.

Thank you for your assistance.

cc: T. Yeates, Dep. Dir., S&A Div.
A.R. Winklhofer, EDO, West Lake
R. Buckley, EDO, Grosse Ile

Bryson/Fenner/Grimes
Bloom
Frumm
Phelus
Muno/Miner
✔Leder
Acierto
Mutnan
Pankanin

EPA Form 1320-6 (Rev. 3-76)